

SECTION I—CLAIMS

Amendment to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application. Claims 1-3, 5, 7, 13-15, 35-36, 39, 44-46, and 54-55 are amended herein. Claims 4, 6, 8-10, 16-34, 38, 40-43, 47-53, and 55-66 remain canceled herein without prejudice. New claims 67-68 are presented herein.

Listing of Claims:

1. (Currently amended) In a monitoring architecture, a [[A]] method, comprising:

assigning each of a plurality of runtime beans to a respective one or more of a plurality of resources to be monitored, wherein each of the plurality of runtime beans to provide monitoring information regarding each of the respective one or more resources to be monitored to a monitor bean associated with the runtime bean assigned to the respective resource, the monitor bean one of a plurality of monitor beans in the monitoring architecture;

arranging the plurality of monitor managed beans into a hierarchical tree structure, wherein each of the monitor managed beans to receive the monitoring information regarding the resource to be monitored from the runtime bean assigned to the monitor bean, and wherein each of the plurality of monitor beans in the hierarchical tree structure to be individually represented as a tree node of the hierarchical tree structure; seek monitoring of one or more corresponding resources of a plurality of resources associated with one or more nodes of a plurality of nodes of the hierarchical tree structure, wherein the monitor

~~managed beans are associated with runtime managed beans responsible for monitoring the plurality of resources;~~

monitoring the plurality of resources via the plurality of runtime managed beans respectively assigned to the plurality of resources; and wherein each of the runtime managed beans to collect monitoring information for its assigned resource of the plurality of resources; and receiving the monitoring information from the plurality of runtime managed beans at the plurality of monitor beans associated with the runtime beans, wherein the tree node associated with each monitor bean within the hierarchical tree structure provides individual reporting of the corresponding resource based on the monitoring information received by the monitor bean represented by the tree node. ~~, wherein the monitoring information is received by the monitor managed beans at the plurality of nodes.~~

2. (Currently amended) The method of claim 1, further comprising:

receiving a notification from the runtime managed beans signaling availability of the monitoring information; and

~~in response to receiving the notification, the monitor managed beans~~

requesting the monitoring information from the runtime managed beans in response to receiving the notification.

3. (Currently amended) The method of claim 1, further comprising:

receiving a timer notification from a timer indicating availability of the monitoring information; and

~~in response to receiving the timer notification, the monitor managed beans~~

requesting the monitoring information from the runtime managed beans in response to receiving the timer notification.

4. (Cancelled).
5. (Currently amended) The method of claim 1, wherein the plurality of resources include one or more of Advanced Business Application Programming (ABAP) resources associated with an ABAP engine, ~~and~~ Java resources associated with a Java 2 Platform[[,]] Enterprise Edition (J2EE) engine, kernel service resources, kernel interface resources, and kernel library resources, ~~the plurality of resources include one or more of kernel, services, interfaces, and libraries.~~
6. (Cancelled).
7. (Currently amended) The method of claim 1, further comprising communicatively interfacing ~~coupling~~ the hierarchical tree structure with a central database and one or more client-level applications using a monitor service.
- 8-10. (Cancelled).
11. (Previously Presented) The method of claim 1, further comprising displaying the monitoring information via a monitor viewer.
12. (Previously Presented) The method of claim 11, wherein the monitor viewer includes one or more of a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer.
13. (Currently amended) The method of claim 1, wherein the monitoring information includes one or more of a current monitoring status of the plurality of resources, a monitoring history of the plurality of resources, and general information relating to the plurality of resources.
14. (Currently amended) The method of claim 13, wherein the current monitoring status includes a color-coded indication of at least one of status of a resource being monitored among the

plurality of resources, wherein the color-coded indication indicates the resource is nearing a critical value, ~~the resource reaching the critical value, and the resources not being monitored.~~

15. (Currently amended) The method of claim 13, wherein the monitoring history includes monitoring history of the plurality of resources that is collected over a predetermined time ~~periods~~ period.

16-34. (Cancelled).

35. (Currently amended) A monitoring system comprising:

an application server having a processor and a storage medium coupled with the processor via a bus, ~~the server further having an application server,~~ the application server to:

assign each of a plurality of runtime beans to a respective one or more of a plurality of resources to be monitored, wherein each of the plurality of runtime beans to provide monitoring information regarding each of the respective one or more resources to be monitored to a monitor bean associated with the runtime bean assigned to the resource, the monitor one of a plurality of monitor beans communicably interfaced with the application server;

arrange the plurality of monitor ~~managed~~ beans into a hierarchical tree structure, wherein each of the monitor ~~managed~~ beans to receive the monitoring information regarding the resource to be monitored from the runtime bean assigned to the monitor bean, and wherein each of the plurality of monitor beans in the hierarchical tree structure to be individually represented as a tree node of the hierarchical tree structure; ~~seek monitoring of one or more corresponding resources of a plurality of resources associated with one or more nodes of a plurality of nodes of the hierarchical tree structure, wherein the monitor managed beans are associated with runtime managed beans responsible for monitoring~~

~~the plurality of resources;~~

monitor the plurality of resources via the plurality of runtime managed beans respectively
assigned to the plurality of resources; and ~~wherein each of the runtime managed beans~~
~~to collect monitoring information for its assigned resource of the plurality of resources;~~
~~and~~
receive the monitoring information from the plurality of runtime managed beans at the plurality
of monitor beans associated with the runtime beans. ~~wherein the monitoring information~~
~~is received by the monitor managed beans at the plurality of nodes.~~

36. (Currently amended) The system of claim 35, wherein the application server is further to
~~couple~~ communicably interface the hierarchical tree structure with a central database and
one or more client-level applications using a monitor service.

37. (Previously Presented) The system of claim 36, wherein the one or more client-level
applications include one or more of a computing center management system,
administrative tools, and third party tools.

38. (Cancelled).

39. (Currently amended) The system of claim 35, wherein the administrative tools include a
monitor viewer to display the monitoring information, wherein the monitor viewer
includes a customized visual administrator monitor viewer, a Web-based monitor viewer,
and a Graphical User Interface (GUI) based ~~(GUI) based~~ monitor viewer.

40-43. (Cancelled).

44. (Currently amended) A machine-readable storage medium having instructions stored thereon
which, when executed, cause a machine to:
assign each of a plurality of runtime beans to a respective one or more of a plurality of resources

to be monitored, wherein each of the plurality of runtime beans to provide monitoring information regarding each of the respective one or more resources to be monitored to a monitor bean associated with the runtime bean assigned to the resource, the monitor bean one of a plurality of monitor beans communicably interfaced with the machine;

arrange the plurality of monitor managed beans into a hierarchical tree structure, wherein each of the monitor managed beans to receive the monitoring information regarding the resource to be monitored from the runtime bean assigned to the monitor bean, and wherein each of the plurality of monitor beans in the hierarchical tree structure to be individually represented as a tree node of the hierarchical tree structure; seek monitoring of one or more corresponding resources of a plurality of resources associated with one or more nodes of a plurality of nodes of the hierarchical tree structure of a monitor tree, wherein the monitor managed beans are associated with runtime managed beans responsible for monitoring the plurality of resources;

monitor the plurality of resources via the plurality of runtime managed beans respectively assigned to the plurality of resources; and , wherein each of the runtime managed beans to collect monitoring information for its assigned resource of the plurality of resources;
and

receive the monitoring information from the plurality of runtime managed beans at the plurality of monitor beans associated with the runtime beans. , wherein the monitoring information is received by the monitor managed beans at the plurality of nodes.

45. (Currently amended) The machine-readable storage medium of claim 44, wherein the instructions which, when executed, further cause the machine to:
receive a notification from the runtime ~~managed~~ beans signaling availability of the monitoring

information; and

~~in response to receiving the notification, the monitor managed beans~~ request the monitoring information from the runtime ~~managed~~ beans in response to receiving the notification.

46. (Currently amended) The machine-readable storage medium of claim 44, wherein the instructions which, when executed, further cause the machine to: receive a timer notification from a timer indicating availability of the monitoring information; and

~~in response to receiving the timer notification, the monitor managed beans~~ request the monitoring information from the runtime ~~managed~~ beans in response to receiving the timer notification.

47-53. (Cancelled).

54. (Currently amended) The machine-readable storage medium of claim 44, wherein the instructions which, when executed, further cause the machine to display the monitoring information via a monitor viewer.

55. (Currently amended) The machine-readable storage medium of claim 54, wherein the monitor viewer includes one or more of a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer.

56-66. (Cancelled).

67. (New) The machine-readable storage medium of claim 44, wherein each of the plurality of monitor beans in the hierarchical tree structure represented as a tree node of the hierarchical tree structure to individually report the monitoring information regarding the resource to be monitored from the runtime bean associated with the monitor bean.

68. (New) The system of claim 35, wherein each of the plurality of monitor beans in the hierarchical tree structure represented as a tree node of the hierarchical tree structure to individually report the monitoring information regarding the resource to be monitored from the runtime bean associated with the monitor bean.